

ABSTRACT OF THE DISCLOSURE

The present invention provides a gold-plated body, a method for surface treatment of a gold-plated body, a surface-treated product, and an immobilization method which make it possible to immobilize a large number of sulfur-containing molecules. With the surface treatment method in accordance with the present invention, the surface of a gold-plated body is subjected to an annealing treatment at a temperature of 350 to 790°C so that a large number of sulfur-containing molecules can be immobilized thereon. In particular, the treatment is conducted so as to obtain a structure in which surface gold crystals have no less than 30% planes with (1, 1, 1) orientation. The present invention also provides a method for the manufacture of a gold-plated body that allows a large number of sulfur-containing molecules to be immobilized on the surface thereof, by which surface gold crystals are formed from a starting material comprising a crystal growth enhancer.